

CLAIMS

We claim:

- 5 1. An anti-idiotypic antibody directed against Anti-Lewis Y monoclonal antibody.
2. The anti-idiotypic antibody of claim 1, which binds to the variable region of an anti-Lewis Y monoclonal antibody.
- 10 3. The anti-idiotypic antibody of claim 1, which blocks the binding of an anti-Lewis Y monoclonal antibody.
4. The anti-idiotypic antibody of claim 1 which specifically binds hu3S193.
- 15 5. The anti-idiotypic antibody of claim 1 which is selected from the group consisting of a monoclonal antibody, a chimeric antibody, a human antibody, a humanized antibody, or a single chain antibody.
6. The anti-idiotypic antibody of claim 2 which is selected from the group
20 consisting of a monoclonal antibody, a chimeric antibody, a human antibody, a humanized antibody, or a single chain antibody.
7. The anti-idiotypic antibody of claim 3 which is selected from the group
25 consisting of a monoclonal antibody, a chimeric antibody, a human antibody, a humanized antibody, or a single chain antibody.
8. The anti-idiotypic antibody of claim 4 which is selected from the group
30 consisting of a monoclonal antibody, a chimeric antibody, a human antibody, a humanized antibody, or a single chain antibody.
9. A hybridoma capable of producing the anti-idiotypic antibody of claim 1.

10. A hybridoma capable of producing the anti-idiotypic antibody of claim 2.
11. A hybridoma capable of producing the anti-idiotypic antibody of claim 3.
- 5 12. A hybridoma capable of producing the anti-idiotypic antibody of claim 4.
13. The hybridoma of claim 12, which is, selected from the group consisting of LMH-1, LMH-2, and LMH-3.
- 10 14. The anti-idiotypic antibody of claim 4, which is produced by a hybridoma, selected from the group consisting of LMH-1, LMH-2, and LMH-3.
- 15 15. A method of detecting binding specificity of anti-idiotypic antibodies comprising:
- 15 a. coating an Elisa plate with anti-Lewis Y antibody, purified human IgG or other control Mab;
- b. adding purified anti-idiotypic antibody;
- c. incubating with secondary antibody; and
- 20 d. detecting the amount of bound anti-idiotypic antibody, wherein binding of an anti-idiotypic antibody to the antibody evidences binding specificity.
16. The method of claim 15 wherein the mAB is hu3S193.
- 25 17. The method of claim 15 wherein the anti-idiotypic antibody is directed against anti-Lewis Y antigen.
18. A method of detecting anti-idiotypic anti-Lewis Y antibodies capable of blocking the binding of anti-Lewis Y monoclonal antibody comprising:
- 30 a. coating an Elisa plate with Lewis Y-BSA coupled antigen;
- b. adding anti-idiotypic antibody;

- 5 c. adding monoclonal anti-Lewis Y idiotypic antibody; and
 d. detecting bound anti-Lewis Y monoclonal antibody, wherein the amount
 of anti-Lewis Y antibody bound to the antigen in the presence and
 absence of anti-idiotypic antibody is evidence of the ability of the anti-
 idiotypic antibody to block the binding of anti-Lewis monoclonal antibody.
19. The method of claim 18 wherein the anti- anti-Lewis Y monoclonal antibody is
 hu3S193.
- 10 20. The method of claim 18 wherein the anti-idiotypic antibody is directed against
 anti-Lewis Y antibody
21. A method of detecting anti-Lewis Y antibody in a serum sample comprising:
 a. coating ELISA plate with synthetic Lewis Y-BSA antigen;
15 b. adding serum samples to the ELISA plates;
 c. adding peroxidase conjugated anti-Lewis Y anti-idiotypic antibody to the
 ELISA plates; and
 d. determining the presence of anti-Lewis Y antibody from the amount of
 peroxidase conjugated anti-Lewis Y anti-idiotypic antibody bound to
20 antigen-coated ELISA plate.
22. The method of claim 21 wherein the monoclonal idiotypic antibody is hu3S193
23. A method of detecting an anti-Lewis Y HAHA response in a subject who has
25 been administered a humanized anti-Lewis Y monoclonal antibody
 comprising:
 a. collecting serum sample from the subject;
 b. reacting the serum sample to a Lewis Y antigen coated ELISA plate in the
 presence or absence of a peroxidase conjugated anti-Lewis Y antibody;
30 and

- c. determining there from the presence or absence of anti-idiotypic anti-Lewis antibody, wherein presence of anti-idiotypic anti-Lewis antibody evidences a HAHA response.